

## **AMENDMENTS TO THE CLAIMS**

The following listing of claims will replace all prior versions and listings of claims in the application.

### **LISTING OF CLAIMS**

1. (Cancelled)

2. (Cancelled)

3. (Currently Amended) A method for producing an enzyme cellobiase in the presence of glycosylation inhibitor 2-deoxy-D-glucose from cultures of ~~preparation from a growing culture of *Termitomyces clypeatus*~~, said preparation containing high concentration of enzyme ~~increased cellobiase activity~~ in comparison to a control culture, grown in absence of glycosylation inhibitor 2-deoxy-D-glucose, the said method comprising the steps of:

(a) inoculating a mycelial culture of the *Termitomyces clypeatus* into sterilized medium containing carbon and nitrogen sources, inorganic salts, organic nutrients and glycosylation inhibitor 2-deoxy-D-glucose in the range of ~~from~~ about 10 µg/ml to about 2 mg/ml ~~of a glycosylation inhibitor~~ at a pH of ~~between~~ about 3 to 8;

(b) growing the mycelial culture at temperatures between 20-37°C under shaking in aerobic conditions; and

(c) separating ~~the~~ culture medium from the mycelia to obtain ~~produce~~ the enzyme preparation containing cellobiase activity, said enzyme having an increased enzymatic activity in the range of ~~that is increased at least~~ about 1.15-fold units/ml to about 97 units/ml ~~fold in the presence of glycosylation inhibitor 2-deoxy-D-glucose~~ in comparison to cellobiase activity produced by the same organism under the same conditions in absence of the glycosylation inhibitor 2-deoxy-D-glucose.

4. (Cancelled)
5. (Cancelled)
6. (Previously Presented) The method of claim 3 wherein the medium contains assimilable carbon and nitrogen sources, inorganic salts and organic nutrients.
7. (Currently Amended) The method as claimed in claim 3, of claim 6 wherein the ~~assimilable~~ carbon sources of step (a) ~~used~~ are carbohydrates, agrowastes, TCA cycle acids, amino acids, or D-glucosamine wherein the carbohydrates are selected from the group consisting of cellobiose, mannose, fructose, xylose, arabinose, starch, dextrin, cellulose, cotton, and xylan; wherein the agrowastes are selected from the group consisting of baggasse powder, rice-straw powder, wheat bran, corn cob powder, and corn powder; wherein the TCA cycle acids are selected from the group consisting of succinate, fumarate, and maleate; and wherein the amino acids are selected from the group consisting of aspartate, glutamate, serine, histidine, and alanine.
8. (Currently Amended) The method of claim 3 wherein the glycosylation inhibitors is of steps (a) and (c) are selected from the group consisting of tunicamycin, 1-deoxynojirimycin, 2-deoxy-D-glucose and D-glucono-lactone.
9. (Currently Amended) The method as claimed in claim 3, of claim 6 wherein the ~~assimilable~~ nitrogen source in step (a) is selected from the group consisting of ammonium chloride, ammonium nitrate, ammonium dihydrogen orthophosphate, and potassium nitrate.
10. (Currently Amended) The method as claimed in ~~of claim 3,~~ wherein the sterilized medium in step (a) ~~further~~ comprises an organic nutrient selected from the group consisting of malt extract, yeast extract, potato extract, peptone, soya-peptone, bactopeptone, and corn steep liquor.

11. (Currently Amended) The method as claimed in ~~of~~ claim 3, wherein ~~the~~ sterilized medium further comprises a detergent selected from the group consisting of Tween-20, Tween-80, and Tween-100.

12. (Currently Amended) The method as claimed in claim 3, wherein in the presence of 2-deoxy-D-glucose also enhances activity of other enzymes like endoglucanase and cellobiohydrolase. ~~enzyme preparation containing high cellobiase activity also contains high endo-glucanase activity and high cellobiohydrolase activity.~~

13. (Currently Amended) The method as claimed in ~~of~~ claim 8, wherein enhanced enzyme activity of cellobiase is about 2.23 units/ml in presence of about 0.05mg/ml of 2-deoxy-D-glucose. ~~the enzyme preparation containing high cellobiase activity is an enzyme preparation containing cellobiase activity that is at least about 2.2 units/ml, and wherein the sterilized medium contains about 0.05 mg/ml 2-deoxy-D-glucose.~~

14. (Currently Amended) The method as claimed in ~~of~~ claim ~~13~~ 8, wherein enhanced enzyme activity of cellobiase is about 50.09 units/ml in presence of about 1 mg/ml of 2-deoxy-D-glucose. ~~the enzyme preparation containing high cellobiase activity is an enzyme preparation having cellobiase activity that is at least about 50 units/ml, wherein the sterilized medium contains about 1 mg/ml 2-deoxy-D-glucose.~~

15. (Currently Amended) The method as claimed in ~~of~~ claim ~~14~~ 8, wherein enhanced enzyme activity of cellobiase is ~~the enzyme preparation containing high cellobiase activity is an enzyme preparation having cellobiase activity that is at least about 90 units/ml, wherein the sterilized medium contains about~~ in presence of about 300 µg/ml 2-deoxy-D-glucose.

16. (Currently Amended) The method as claimed in ~~of~~ claim ~~14~~ 8, wherein enhanced enzyme activity of cellobiase is ~~the enzyme preparation containing high cellobiase activity is an enzyme preparation having cellobiase activity that is at least~~

about 140 units/ml in presence of, ~~wherein the sterilized medium contains about 1 mg/ml 2-deoxy-D-glucose and further contains about 500 µg/ml of 2-deoxy-D-glucose. mannose.~~

17. (Currently Amended) The method as claimed in ~~of claim 8~~, wherein enhanced enzyme activity of cellobiase is ~~the enzyme preparation containing high cellobiase activity is an enzyme preparation having cellobiase activity that is at least about 6.18 units/ml in presence of~~, ~~wherein the sterilized medium contains at least about 2 mg/ml of~~ glucono-lactone.

18. (Currently Amended) The method as claimed in ~~of claim 8~~, wherein enhanced enzyme activity of cellobiase is ~~the enzyme preparation containing high cellobiase activity is an enzyme preparation having cellobiase activity that is at least about 1.4 units/ml in presence of~~, ~~wherein the sterilized medium contains at least about 80 µM of~~ 1-deoxynojirimycin.